

BISBEE MUNICIPAL AIRPORT
Bisbee, Arizona

AIRPORT MASTER PLAN - 1999

APPENDIX B

PAC MEETINGS AND PUBLIC INVOLVEMENT



Gannett Fleming
ENGINEERS AND PLANNERS

RECEIVED

MAY 11 1999

AERONAUTICS DIVISION

GANNETT FLEMING, INC.
Suite 130
3001 East Camelback Road
Phoenix, AZ 85016-4498
Fax: (602) 553-8816
Office: (602) 553-8817

May 7, 1999

Mr. William Kelly, City Manager
City of Bisbee
118 Arizona Street
Bisbee, AZ 85603

RD / RW
RB

RE: Bisbee Municipal Airport Master Plan
GF Job No. 36187

Dear Mr. Kelly:

Attached please find a revised schedule for the above-referenced project. We have added a proposed meeting for May 20 at which time the alternatives section would be discussed and an alternative selected. One member of the Consultant Team would be present to facilitate the meeting.

If you have any questions or comments, please call.

Sincerely,

GANNETT FLEMING, INC.

Ronald D. Schreier, P.E.
Project Manager

RDS/dp

c: Distribution List

BISBEE AIRPORT MASTER PLAN

**PROJECT SCHEDULE FOR MEETINGS
AND ANTICIPATED DELIVERY DATES**

Revised May 4, 1999

	Proposed	Actual
Notice-To-Proceed	January 19, 1999	January 19, 1999
PAC Meeting No. 1 (Kick-Off)	March 25, 1999	March 25, 1999
Deliver Phase I Report	April 15, 1999	April 8, 1999
PAC Meeting No. 2	April 29, 1999	April 22, 1999
Deliver Alternatives Section	May 7, 1999	
PAC Meeting No. 3	May 20, 1999	
Deliver Phase II Report	June 10, 1999	
PAC Meeting No. 4	June 24, 1999	
Deliver Draft Final Report	August 5, 1999	
PAC Meeting No. 5	August 19, 1999	
Deliver Final Report	September 9, 1999	
Contract End Date	September 17, 1999	

Note: Meeting dates are subject to adjustment

AGENDA

Bisbee Municipal Airport Master Plan Planning Advisory Committee (PAC) Meeting #3

1. Participants' sign-in and introductions
2. Approval of the Minutes from PAC Meeting #2
3. Revisions to the PAC Workbook, through Section 3
4. Approval of Sections 2 and 3 as parts of the Draft Master Plan
5. Discussion of Section 4, Development Alternatives
6. PAC selection of a development alternate.
7. Updated Project Schedule
8. Set next meeting date

MEMO

To: Distribution List
From: Kristina Fields, Gannett Fleming, Inc.
Subject: **Planning Advisory Committee Meeting No. 3**
Date: May 7, 1999

Please note that the third meeting of the Planning Advisory Committee for the Bisbee Municipal Airport Master Plan will be Thursday, May 20 at 10:00 AM at the Bisbee Municipal Airport.

Attached is a copy of the agenda and updated PAC Workbook distribution papers. Please follow the instructions on the "Revisions and Additions" sheet included with this packet in order to update your copy.

Thank you.

NAME OF AIRPORT: _____ REVIEWER: _____ Chap/PH: _____

AIRPORT MASTER PLAN CHECKLIST

DATE: _____

NOTES: *The purpose of this checklist is to determine if the major factors in an Airport Master Plan(AMP) have been covered/reviewed and the condition(s) adequately described. The purpose is not to dictate the format/style the AMP should take. It is the Reviewer's responsibility to find these subject areas in the AMP.*

LEGEND: ✓ = Subject covered satisfactorily

□ ○ = Subject not reviewed/not required

☒ ☒ = Subject missing or inadequately described. A remark may be required.

* = This subject needs to be illustrated on an exhibit

** = A color exhibit is recommended

I. CHAPTER ONE: INVENTORY

☐ 1. AIRPORT SETTING:

- ☐ A. Address any issues/objectives of the sponsor.
- ☐ B. Include airport size (acres), ARC and elevation.

☐ 2. AIRPORT HISTORY:

- ☐ A. Include references to previous master plans.
- ☐ B. Include property ownership and how/when acquired

☐ 3. DEVELOPMENT HISTORY:

- ☐ A. Last 10 years preferred. Last five years required.

☐ 4. AIRPORT ACTIVITY (May be in Forecasts)

- ☐ A. HISTORICAL BASED AIRCRAFT
- ☐ B. HISTORICAL OPERATIONS
- ☐ C. HISTORICAL ENPLANEMENTS
- ☐ D. HISTORICAL AIRLINES THAT SERVED THE AIRPORT
- ☐ E. HISTORICAL O&D

☐ 5. EXISTING FACILITIES: Dimensions, weight bearing strength and no. of runways/taxiways; property lines, avigation easements.

- ☐ *A. AIRSIDE: (RUNWAYS, TAXIWAYS, NAVAIDS, LIGHTING, MARKING)

☐ *B. LANDSIDE:

- ☐ *(1) TERMINAL: Age, Sq Feet, Tenants, Location
- ☐ *(2) FBO'S: Name, Type, Sq Feet, Location, Business
- ☐ *(3) APRON- ITINERANT AND LOCAL: Sq Yards, No. of Tiedowns, Location
- ☐ *(4) HANGARS: Quantity by type, Shade vs. Enclosed, Sq Ft
- ☐ *(5) AUTO PARKING: No. of spaces, Type, Sq Ft/Yd, employee vs. public
- ☐ *(6) ARFF: No. of vehicles, type, age, capabilities, personnel
- ☐ *(7) ATCT: Location, No. of personnel, hrs of operation, auto parking spaces
- ☐ *(8) MAINTENANCE: Size (Sq Ft), No. of personnel, No. & Type vehicles
- ☐ *(9) SECURITY: *Fencing (location & type), *No. of gates (manual/electrical),
 - ☐ (a) No. of personnel
 - ☐ (b) No. of vehicles, hours of operation
- ☐ *(10) FUEL STORAGE: No./quantity of tanks, fuel type, location, conform to Dec 98 EPA/ADEQ Standards, No. of refueling vehicles, trained personnel, hours of operation.
- ☐ *(11) AWOS/ASOS: Location and model/type, tied into NWS?
- ☐ *(12) UTILITIES: Source of gas, water, electric, telephone and indicate capacity/capability; sewer, waste treatment facilities; emergency power.
- ☐ *(13) TENANTS: Describe all non-aviation airport tenants, size of facilities, no. of personnel, type of business, location.
- ☐ *(14) AIRPORT ACCESS/SIGNAGE: Assess current road capacity/structure.

☐ 6. AIRSPACE AND AIR TRAFFIC CONTROL

☐ A.AREA AIRPORTS

☐ *B. AIRSPACE STRUCTURE

☐ *C. AIRWAYS

☐ *D. RESTRICTED AREAS

☐ *E. MOA'S

- ☐ F. LOCAL PROCEDURES: Traffic patterns: type/location, VFR/IFR departure /arrival procedures (an exhibit is optional); ARTCC Center.
- ☐ G. NOISE ABATEMENT PROCEDURES
- ☐ *H. WILDERNESS/HISTORICAL AREAS
- ☐ *I. STANDARD INSTRUMENT DEPARTURES/APPROACHES
- ☐ 7. SOCIOECONOMIC FACTORS: Show minimum of five years historical; Indicate both State, County and Local.
 - ☐ A. POPULATION: Must indicate AZ DES data as a minimum.
 - ☐ B. EMPLOYMENT
 - ☐ C. INCOME
 - ☐ D. COMPARISONS
- ☐ 8. **LAND USE PLANNING: A color exhibit indicating current land use in airport vicinity is recommended; Minimum area included in the exhibit should be sized according to the Traffic Pattern Airspace for the category of airport as outlined in FAA Order 7400.2D, Part III, Chapter 10, Figure 10-14. NOTE: Land Use/Noise Plan requires the same size area.
 - ☐ *A. POLITICAL JURISDICTIONAL BOUNDARIES
 - ☐ *B. AIRPORT PROPERTY LINES
 - ☐ *C. AIRPORT RUNWAY PROTECTION ZONES
 - ☐ *D. CODED LAND USE CATEGORIES.
 - ☐ E. DESCRIBE JURISDICTIONAL LAND USE PLANS AFFECTING AIRPORT
- ☐ 9. GROUND TRANSPORTATION NETWORK: Describe rail, bus, truck service to city.
- ☐ 10. CLIMATE
 - ☐ *A. WINDROSE: Dates of information(minimum 10 years constitutes a valid rose)
 - ☐ B. PERCENT WIND COVERAGE OF ALL RUNWAYS FOR 12 & 15 mph and indicated in knots) WINDS
 - ☐ C. MEAN MAXIMUM HIGH TEMPERATURE AND MONTH.
 - ☐ D. ANNUAL RAINFALL, SNOWFALL, IFR DAYS, PVC DAYS.

NOTE: ASTERISKS INDICATE ELEMENTS THAT MUST BE INCLUDED ON THE APPROPRIATE EXHIBITS.

II. CHAPTER TWO - FORECASTS

☐ 1. TRENDS AT THE NATIONAL LEVEL

- ☐ A. MAJOR AIRLINES
- ☐ B. REGIONAL/COMMUTER AIRLINES
- ☐ C. GENERAL AVIATION
- ☐ D. HELICOPTERS

☐ 2. FORECASTING METHODOLOGY

☐ *3. SERVICE AREA

☐ 4. AIRLINE ACTIVITY

- ☐ A. ENPLANEMENTS (an exhibit is optional)
- ☐ B. OPERATIONS (an exhibit is optional)
- ☐ C. ORIGIN-DESTINATION DATA (May be in inventory)
- ☐ D. FLEET MIX
- ☐ E. COMPARISONS WITH OTHER FORECASTS (an exhibit is optional)

☐ 5. GENERAL AVIATION

- ☐ A. BASED AIRCRAFT: List of aircraft by type, model and tail# should be illustrated by table, exhibit or appended to the Master Plan.
 - ☐ (1) NUMBERS AND PROJECTIONS (an exhibit is optional)
 - ☐ (2) FLEET MIX AND PROJECTIONS (an exhibit is optional)
- ☐ B. OPERATIONS (an exhibit is optional)
 - ☐ (1) LOCAL
 - ☐ (2) ITINERANT
 - ☐ (3) MILITARY
 - ☐ (4) OTHER USER GROUPS
- ☐ C. COMPARISONS WITH OTHER FORECASTS (an exhibit is optional)

☐ 6. AIR CARGO OPERATIONS

- ☐ A. TONNAGE- MAIL
- ☐ B. TONNAGE- AIRLINES
- ☐ C. TONNAGE- FEDERAL EXPRESS/UPS
- ☐ D. AIRCRAFT TYPES
- ☐ E. COMPARISONS WITH OTHER FORECASTS (an exhibit is optional)
- ☐ 7. ANNUAL INSTRUMENT APPROACHES
- ☐ 8. PEAKING CHARACTERISTICS
 - ☐ A. AIRLINE PEAKING CHARACTERISTICS
 - ☐ (1) PEAK MONTH
 - ☐ (2) PEAK DAY
 - ☐ (3) DESIGN HOUR- OPERATIONS
 - ☐ (4) DESIGN HOUR - PASSENGERS
 - ☐ (5) BUSY DAY
 - ☐ B. GENERAL AVIATION PEAKING CHARACTERISTICS
 - ☐ (1) PEAK MONTH
 - ☐ (2) PEAK DAY
 - ☐ (3) DESIGN HOUR- OPERATIONS
 - ☐ (4) DESIGN HOUR - PASSENGERS
 - ☐ (5) BUSY DAY

NOTE: EACH FORECAST TABLE/GRAPH SHOULD CONTAIN FORECASTS OF OTHER AGENCIES WHENEVER POSSIBLE.

III. CHAPTER THREE: FACILITY REQUIREMENTS

- ☐ 1. DEMAND CAPACITY
 - ☐ A. AIRSPACE CAPACITY ANALYSIS
 - ☐ B. AIRFIELD CAPACITY ANALYSIS: FAA AC 150/5060-5
 - ☐ (1) METEOROLOGICAL CONDITIONS

- (2) RUNWAY USE PERCENTAGES
- (3) AIRCRAFT MIX: Existing and Forecast .
- (4) PERCENT ARRIVALS
- (5) PERCENT TOUCH AND GO
- (6) EXIT TAXIWAY LOCATIONS
- (7) RUNWAY CONFIGURATIONS
- (8) ANNUAL SERVICE VOLUME: Existing and Forecast (an exhibit is optional)
- (9) HOURLY CAPACITY: VFR & IFR Existing and Forecast (an exhibit is optional)
- (10) HOURLY & ANNUAL DELAY: VFR & IFR Existing and Forecast(an exhibit is optional)
- C. GATE CAPACITY
- D. TAXIWAY CAPACITY
- E. RUNWAY ORIENTATION: Does it meet FAA 95% Criteria
- F. RUNWAY GRADIENT: Does it exceed 1.5%
- 2. FACILITY REQUIREMENTS: Existing and Forecast
 - A. AIRSIDE (an exhibit is optional)
 - (1) RUNWAYS: Length, width and strength
 - (2) TAXIWAYS: Type, width and strength
 - (3) NAVIGATIONAL AIDS
 - (4) MARKING & LIGHTING
 - B. LANDSIDE (an exhibit is optional)
 - (1) TERMINAL BUILDING
 - (2) APRON AND GATE POSITIONS
 - (3) AUTO PARKING
 - (4) AIR CARGO REQUIREMENTS
 - (5) GENERAL AVIATION REQUIREMENTS

- (A) HANGARS
- (B) APRON
- (C) TERMINAL
- (D) AUTO PARKING
- (E) FUEL STORAGE
- (6) AIRPORT ACCESS
 - (A) ROADWAY CAPACITY
- (7) AIRPORT RESCUE AND FIREFIGHTING
- (8) AIR TRAFFIC CONTROL TOWER
- (9) UTILITIES: Electric, water, sewer, gas, telephone.
- (10) PROPERTY REQUIREMENTS/DEFICIENCIES

IV. CHAPTER FOUR - DEVELOPMENT ALTERNATIVES

- ☐ 1. *AIRSIDE ALTERNATIVES
 - ☐ A. RUNWAYS
 - ☐ B. TAXIWAYS
 - ☐ C. NAVIGATIONAL AIDS
 - ☐ D. RUNWAY PROTECTION ZONES
 - ☐ E. LAND ACQUISITION
- ☐ 2. *TERMINAL BUILDING ALTERNATIVES
- ☐ 3. *AIR CARGO ALTERNATIVES
- ☐ 4. *LANDSIDE ALTERNATIVES: The major elements discussed under Facility Requirements should be addressed. The following elements might be included:
 - ☐ A. HANGARS
 - ☐ B. APRON
 - ☐ C. TAXILANES
 - ☐ D. FBO FACILITIES

- ☐ E. MAINTENANCE FACILITIES
- ☐ F. WASH RACK FACILITIES
- ☐ G. ARFF FACILITIES
- ☐ H. ACCESS ROADS
- ☐ I. PERIMETER ROADS
- ☐ J. FENCING/GATES
- ☐ K. FUEL STORAGE FACILITIES
- ☐ L. REVENUE GENERATING LAND AREAS
- ☐ M. LAND ACQUISITION/EASEMENTS
- ☐ 5. FUTURE AIRPORT- PROJECTION TO 50 YEARS (OPTIONAL): In order to provide the sponsor with a long range perspective of the future airport, consider land that might need to be acquired, land off-airport that needs to be protected from encroachment and potential runway extensions/additions that might be necessary. A brief description of the factors that were considered in forecasting the future airport, as well as an exhibit depicting the possible layout of the future airport should be provided as a minimum. (an exhibit is optional)

V. CHAPTER FIVE - AIRPORT PLANS

- ☐ *1. AIRPORT LAYOUT PLAN (ALP) DESCRIPTION
 - ☐ A. DESIGN STANDARDS USED
 - ☐ B. DEVIATION FROM DESIGN STANDARDS
 - ☐ C. DEVELOPMENT STAGING
 - ☐ D. *NOTE: The Location and Vicinity Maps will conform to guidelines in AC 150/5070-6A, page 59.*
- ☐ *2. TERMINAL AREA PLAN (TAP)
 - ☐ A. DESIGN STANDARDS USED
 - ☐ B. DEVELOPMENT STAGING
- ☐ *3. PART 77 AIRSPACE PLAN: List and number all obstructions :
 - ☐ A. PRIMARY SURFACE OBSTRUCTIONS
 - ☐ B. TRANSITION SURFACES OBSTRUCTIONS
 - ☐ C. HORIZONTAL SURFACE OBSTRUCTIONS

- ☐ D. CONICAL SURFACE OBSTRUCTIONS
- ☐ *4. APPROACH ZONES PLAN: List and number all obstructions :
- ☐ A. APPROACH ZONE OBSTRUCTIONS
- ☐ *5. RUNWAY PROTECTION ZONES (RPZ) PLAN: List and number all obstructions :
- ☐ A. RPZ OBSTRUCTIONS
- ☐ *6. LAND USE/NOISE CONTOUR PLAN: Land Use Map should be sufficient in scope to include , as a minimum, the Traffic Pattern Airspace for the category of airport as indicated in FAA Order 7400.2D, Part 3, Ch 10, Para 10-14, Fig 10-14(5). The Plan must indicate the future land use designations by the appropriate political sub-divisions and indicate recommendations for changes to the future land uses are warranted. Noise Contours should be developed with the FAA Integrated Noise Model (latest version available) for the end of the planning period . The Plan should indicate what INM version was used. NOTE: If noise contours development has not been included in the contract, use the Arizona State System Plan Noise Contours and annotate the Plan accordingly. Land Use/Noise Plan exhibits used in the Master Plan are preferred in color.
- ☐ A. INDICATE ALL JURISDICTIONAL BOUNDARIES
- ☐ B. ILLUSTRATE RECOMMENDED ON- AND OFF-AIRPORT LAND USES
- ☐ C. BASE MAP SHOULD DEPICT THE END OF THE PLANNING PERIOD ALP
- ☐ *7. PROPERTY MAP
- ☐ A. DESCRIPTION OF PARCELS: Number, Recorders #, Docket and Page #, Date of Recording, Acreage and Description.
- ☐ B. DESCRIPTION OF PARCELS RECOMMENDED FOR ACQUISITION

VI. CHAPTER SIX - ENVIRONMENTAL EVALUATION

☐ 1. ENVIRONMENTAL EVALUATION (EE): Is required to be conducted under the requirements of FAA Order 5050.4A, Airport Environmental Handbook for all initial master plans and future master plans where there is a significant change in the development plan since the last master plan. NOTE: Contracts for Airport Master Plan Updates that have not had an EE or Environmental Assessment (EA) for airport development in the past seven years should include and environmental evaluation in the scope of work.

- ☐ *A. PROPOSED DEVELOPMENT
- ☐ B. SPECIFIC IMPACTS
 - ☐ * (1) NOISE: Existing and end of planning period noise contours
 - ☐ (2) COMPATIBLE LAND USE (an exhibit is optional)
 - ☐ (3) SOCIAL IMPACTS
 - ☐ (4) INDUCED SOCIOECONOMIC IMPACTS
 - ☐ (5) AIR QUALITY

- (6) WATER QUALITY
- (7) DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F) LANDS
- (8) HISTORIC, ARCHITECTURAL, ARCHAEOLOGICAL & CULTURAL
- (9) BIOTIC COMMUNITIES & THREATENED, ENDANGERED SPECIES
- (10) WETLANDS & WATERS OF THE U.S.
- (11) FLOODPLAIN
- (12) COASTAL ZONE MANAGEMENT PROGRAM & COASTAL BARRIERS
- (13) WILD & SCENIC RIVERS
- (14) FARMLAND
- (15) ENERGY SUPPLY AND NATURAL RESOURCES
- (16) LIGHT EMISSIONS
- (17) SOLID WASTE
- (18) INSTALLATION RESTORATION SITES (NATIONAL PRIORITIES LIST)
- (19) CONSTRUCTION IMPACTS
- (20) OTHER
 - (A) CONSISTENCY WITH OTHER PLANS
 - (B) LAND OWNERSHIP
 - (D) WATER USE
- (21) CONCLUSION

VII. CHAPTER SEVEN - CAPITAL IMPROVEMENT PROGRAM & FINANCIAL PLAN

- ☐ 1. AIRPORT MANAGEMENT STRUCTURE (May be omitted if included in Chapter One)
- ☐ 2. CAPITAL IMPROVEMENT PROGRAM:
 - ☐ A. AIRPORT DEVELOPMENT SCHEDULE : Exhibits should highlight major projects included in each development stage.
 - *(1) STAGE ONE: First five years of the Plan: Each project in each year, delineated by cost and cost share for each category(Federal, State, Local and Private/Other)
 - *(2) STAGE TWO: Next five years of the Plan: Each in the five-year period delineated by cost and cost share for each category(Federal, State, Local and Private/Other)
 - *(3) STAGE III: Plan Years 11 through 20: Each project in the 10 year period delineated by cost and cost share for each category(Federal, State, Local and Private/Other)
 - ☐ B. AIRPORT DEVELOPMENT COST SUMMARY: Use current and non-inflated dollars, indicate percent of engineering and contingency funds included in project costs.
 - ☐ C. ECONOMIC FEASIBILITY ANALYSIS
 - (1) ANALYSIS OF FEDERAL & STATE AID TO AIRPORTS
 - (2) ANALYSIS OF OTHER FINANCIAL AID AVAILABLE TO THE AIRPORT
 - (3) CASH FLOW ANALYSIS

- (A) ANALYSIS OF REVENUE SOURCES: Airport projected operating revenue by category.
- (B) ANALYSIS OF EXPENSES: Airport projected operating expenses by category.
- ☐ D. STAGE I DEVELOPMENT AND COSTS: A Table of projects by year, type, federal, state, local and private distribution with a color (preferred) exhibit depicting the projects in the stage .
- ☐ E. STAGE II DEVELOPMENT COSTS: A Table of projects by year, type, federal, state, local and private distribution with a color (preferred) exhibit depicting the projects in the stage .
- ☐ F. STAGE III DEVELOPMENT COSTS: A Table of projects by year, type, federal, state, local and private distribution with a color (preferred) exhibit depicting the projects in the stage .

VIII. APPENDICES

NOTE: THIS LIST IS A GUIDELINE OF POSSIBLE APPENDICES:

- ☐ 1. GLOSSARY
- ☐ 2. SURVEYS AND RESULTS
- ☐ 3. MINUTES OF PLANNING ADVISORY COMMITTEE MEETINGS: Note all *written* comments from members of the PAC require a *written* response included in the Master Plan.
- ☐ 4. CORRESPONDENCE FROM CHAPTER SEVEN COORDINATION: Note all *written* comments from members of the PAC require a *written* response included in the Master Plan.
- ☐ 5. MINIMUM STANDARDS
- ☐ 6. AIRPORT ECONOMIC IMPACT STUDY
- ☐ 7. RATES AND FEES STUDY
- ☐ 8. AIRPORT OPERATING PROCEDURES
- ☐ 9. AIRPORT ACTIVITY COUNTS
- ☐ 10. AIRPORT BASED AIRCRAFT LISTING

DOCUMENTATION REQUIRED: The Aeronautics Division requires the following copies (insure they are indicated in the scope of work):

- 1. WORKING PAPERS/PHASE REPORTS - (1) COPY
- 2. DRAFT FINAL REPORT - (1) COPY
- 3. FINAL REPORT - (1) PAPER COPY

A. 1 COPY ON DISK (3&1/2"), IBM FORMAT, WORD PROCESSING COMPATIBLE WITH MICROSOFT WORD VERSION (*INSERT VERSION NUMBER HERE*).

4. AIRPORT PLAN SETS:

A. (1) ONE COPY OF SIGNED ALP ORIGINAL WITH SIGNED FAA(OR ADOT) APPROVAL -

B. (1) COPY OF THE FINAL AIRPORT LAYOUT PLAN SET

C. (1) COPY OF DIGITIZED ALP PLAN SET ON DISK, IBM FORMAT

D. FAA WESTERN-PACIFIC REGION (NOTE: *Not Applicable to Airports in the Secondary System*)

(1) TWO COPIES OF FINAL ALP PLAN SET

(2) TWO COPIES OF AIRPORT MASTER PLAN

**Bisbee Municipal Airport
Master Plan
PAC Meeting #3 Minutes**

Date of Meeting: Thursday, 10:00 AM, May 20, 1999
Minutes Prepared By: Nicholas J. Pela

Attendees: Nicholas J. Pela, Nicholas J. Pela & Associates
Robert Page, Airport Advisory Board
Leslie Wolslagel, Airport Advisory Board
Arthur Kleinschmidt, Airport Advisory Board
John Harris, Airport Advisory Board
Peter Levine, Airport Advisory Board
Jeff Blackmore, Assistant Airport Manager
Carlos A. De La Torre, City of Bisbee Engineer
Ray Sparkman, City of Bisbee Public Works Director
Lyle Reddy, City of Bisbee

The third PAC Meeting was held at the Bisbee City Hall, second floor conference room. The purpose of the meeting was to discuss the status of the planning document to date, including revisions and additions to Sections 2, 3 and 4, and selection of the most appropriate alternate for future airport development. The following is a summary of the items discussed at the meeting.

1. The Minutes from PAC Meeting #2 were approved by the PAC.
2. Nick Pela described the revisions that were made to the PAC Workbook. These included updating the Table of Contents and revisions to Section 3, Airport Facility Requirements. The revisions were made to address the PAC's review and discussion at PAC Meeting #2.
3. Mr. Pela reviewed written comments received from Richard Soto, Airport Manager, pertaining to Sections 3, Airport Facility Requirements and Section 4, Development Alternatives. A copy of Mr. Soto's comments is attached to these Minutes. Pursuant to a telephone conversation prior to the meeting, Mr. Pela informed the PAC that Mr. Soto will be providing the consultant team with takeoff performance data for the Beechcraft 1900, Short 360, DeHavilland Twin Otter and possibly other aircraft that may use the airport in the future as part of a Part 139 certificated operation. He will also be providing additional historical wind data for the airport to further justify the crosswind runway. Section 3 will be revised to indicate a separate schedule of Part 139 improvements that would be required to accommodate operations by aircraft with more than 30 passenger seats. The narrative will be revised to indicate the current Part 139 related qualifications and certifications of Mr. Soto and Mr. Blackmore. Other requested revisions include changing the size of the planned Jet-A tank from 10,000 to 12,000 gallons, and removal of the Runway 2-20 runup pads. The PAC disagreed with Mr. Soto's comment that the airport's perimeter fence should be upgraded from barbed wire to chain link.

The PAC decided that the existing out-of-service Non Directional Beacon (NDB) should be decommissioned and removed rather than repaired. Section 3 and 4 will be revised to consistently indicate this.

The PAC requested that a 24-hour credit card fueling system be added to the development schedule,

concurrent will installation of the Jet-A tank and delivery system. Section 3 will be revised to indicate this.

Mr. Sparkman and Mr. De La Torre informed the PAC that the City has budgeted for an airport courtesy car.

4. Mr. Pela requested PAC approval of Section 2, Forecasts of Aviation Activity. This was granted by the PAC.
5. Mr. Pela presented the updated Section 4, Development Alternatives. During the discussion, Ray Boucher (ADOT - Aeronautics) faxed his comments on this section. A copy is attached to these Minutes. Mr. Boucher's comments were read to the PAC. Mr. Pela responded to the four comments as follows:

Comment 1: Contrary to Ray's comment, the differences in the amount of RPZ land acquisition between the alternatives was quantified in the alternatives analysis. See Page 4-7, which explains the ratings as follows: "Availability of land for airport expansion can seriously affect the viability of a proposal. Except for securing aviation easements for existing approaches, Alternate 1's improvements could be accomplished on the present airport property. Alternate 2 would require a small amount of fee acquisition for Runway 2-20's extension in addition to aviation easements for approaches. Alternate 3 would require the most land acquisition of the three options."

Comment 2: The runway approaches do not impact the airport access road. If Ray is referring to Runway 2's approach over the Highway - the southwest end of the new runway was set by assuring a minimum of 15' clearance from the 20:1 approach surface to the highway. Therefore no vehicular clearance obstruction is indicated. Mr. Harris informed Mr. Pela that there is an existing power line on the west side of the highway. Mr. Pela said that this could be put underground if it is an obstruction. A full obstruction analysis will be included in the Airport Layout Plans.

Comment 3: The narrative will be revised to indicate that all affected land is owned by Phelps Dodge. Mr. Pela told the PAC that the costs at this level of the planning are only "ballpark". The same cost per acre was applied to each of the alternates only as a means of comparison - not necessarily for budget purposes.

Comment 4: The differences in wind coverage ratings is adequately explained on Page 4-6, as follows: "The relative wind coverage is identical between the three alternates because they share the same runway alignments. However, more aircraft are apt to use the crosswind runway if it is paved and a greater range of larger aircraft will be able to use it if it is longer. Alternate 2 and 3 provide paved crosswind landing strips. Alternate 3 provides the longest paved crosswind strip."

6. The PAC selected Alternate 2 as the most appropriate option for future development of the Bisbee Municipal Airport. Mr. Pela informed the PAC that the remainder of the planning work will be based on this decision.
7. Reference was made to the updated project schedule that was sent to the PAC on May 4th. The consultant team will proceed with the next working paper submittal, scheduled to be sent out on June 10th.

The next PAC Meeting was scheduled for 10:00 AM on June 24th, 1999.

Bisbee Airport Master Plan
PAC Meeting #3
NAAC F.D. WILL PROVIDE 1200 GAL.
TRUCK.

Page I.

Page 3-5. Needs to be Revised.

I want FAR 121 Aircraft Specs included.

IE Beechcraft 1900-D models 19 passenger,
SD360 - "SHORTS 360" 36 passenger both
Turbo Prop Aircraft used on short strips,
High Altitude passenger Aircraft. Also
Include DeHavillan Twin Otter Aircraft.
Aircraft 12500 lbs and up!

3-6 - Agree, I want a second opinion on Historical
winds try Lockheed Data Plan Weather systems

³⁻¹¹⁻⁹⁹ ^{James Fleming} → Please call ED PATTERSON, Jim Coleman Flight Control
Academy Tucson - 520-573-3467. They will provide
Historical Winds. FHU - Dug - D9L - if possible surface + aloft

3.7 - For safety reasons, I will need more research on

3.8 Runway 02-20 - to pave it soon as possible.

Also need to remove concrete on app end of Rwy 20.

3.9 - Agree. 3.10 - Agree. NEED TO ERECT NEW TERN BUILDING.

3.13 - MX HANGAR SAVE!! Historical OTHER DESTROY!!

3-14 → #3 3-15 - OK → Please UPDATE ELECTRIC TO
Hold Capacity of "NEW" DEMANDS!! IE... TRANSFORMERS
& Current Electric Wire systems.

Bisbee Airport Master Plan.

Page II

Proc Meeting #3

- 3-16 - Change JET-A- TO 12000 gal - usable - Cost less to purchase by bulk! City saves \$! Change Force TO CHAIN Link - Rise in Airport Usage - Security ~~is~~ Needs to be Improved, "CAVERNS, TOURIST, GOLF, ... ALSO IMMIGRANTS, RECREATIONAL PILOTS + Activity welcomed, could use GRANTS. But yet PART 139 PRIORITY!"
- 3-17. Agree!! 100% Camp + Electricity!!
- 3-18. Agree 100%
- 3-19. PART 139 - INDEX "A" Agree

page 3-20 - SOTO AVIATION CAN Acquire MEN + Equip TO QUALITY Bisbee MOUNT AS A PART 139. by using local FIRE DEPARTMENTS INTER-AGENCY COOPERATION in FIRE MANAGEMENT.

pg. 3-20 + 21 ARE ALL MET BY SOTO AVIATION RICHARD SOTO!! AND soon JEFF BLACKMORE 03-20-24 OK. 03-25-OK 03-26 OK.

04-01-02-03-04 ALL OK.

04-05 - NEED WAIVER ON SOLID WASTE DISPOSAL... FE.

HISTORICAL AIRPORT + HISTORICAL VALUES. OR "DO-NOTHING" if all fails!!!

04-06 - AT #3!! ON ALL. 04-07 - OK!!

04-10 - OK 4-11 OK - 4-12 OK 4-13 OK. 4-14 - OK.

DATE: May 20, 1999

FROM: Ray Boucher, Aviation Program Analyst
ADOT, Aeronautics Division

TO: Mr. Jeff Blackmore, Bisbee Municipal Airport FAX#: 520-432-6069

SUBJECT: Critique of Bisbee Airport Master Plan- Ch 4, Alternatives

Following comments for your review pertaining to the Draft Chapter Four- Alternatives:

1. Alternatives 4B & 4C illustrate RPZ's that exceed property lines of the airport but there does not appear to be any penalty assessed for this nor any attempt to explain why the runway was not adjusted to accommodate the RPZ's within the airport property lines.
2. Alternatives 2 and 3 show the RPZ's for the crosswind runway impacting the access road to the airport and it is doubtful, as illustrated, that they can obtain a 20 to 1 approach slope over the road with a 15 foot required height above the road (see Part 77). Yet on Page 4-7, the text indicates no obstructions to air navigation from any alternative.
3. The alternatives indicate land acquisition required for some of the alternatives however, there is no indication who owns the land needed for the RPZ's nor how the cost was determined. Both of these factors need to be included in the text.
4. The rankings for Wind Coverage for each of the alternatives is confusing. What specifics cause the ratings between 1, 2 and 3 to differ? All the runway alignments appear the same.

If you should have any questions, do not hesitate to call. (602-254-6234)

**Bisbee Municipal Airport
Master Plan
PAC Meeting #4 Minutes**

Date of Meeting: Thursday, 10:30 A.M., June 24, 1999
Minutes Prepared By: Nick Pela

Attendees: Nick Pela, Nicholas J. Pela & Associates
Kristina Fields, Gannett Fleming, Inc.
Robert Page, Airport Advisory Board
Richard F. Soto, Airport Manager
Jeff Blackmore, Assistant Airport Manager
Peter Levine, Airport Advisory Board
Leslie Wolslagel, Airport Advisory Board
Arthur Kleinschmidt, Airport Advisory Board
Carlos De La Torre, City of Bisbee Engineer

The fourth PAC meeting was held at the Bisbee City Hall, second floor conference room. The purpose of the meeting was to present and discuss Environmental Factors, the draft Airport Layout Plan, the Financial Plan, and the revisions and additions to prior Working Papers.

The following items were discussed at the meeting:

1. Introduction of Attendees and Sign-in.
2. The minutes from PAC Meeting #3 were approved.
3. Kristina Fields presented the revisions and additions that were made to Sections 1 through 4 of the Master Plan PAC Workbook.
4. Nick Pela asked for PAC approval of Sections 1-4. The PAC approved these sections by unanimous vote.
5. Kristina Fields presented Section 5: Environmental Factors to the PAC. Information packages have been sent to a list of over 20 environmental jurisdictional agencies for review and comment. To date, only a few responses have been received, and these do not indicate any concerns. Section 5 will address all comments received prior to the next meeting. All letters will be included in the report for future reference.

Peter Levine asked how the noise contours would be affected by changing the assumed runway utilization percentages. N. Pela explained that the noise contours would change somewhat if the utilization mix were to be changed. The assumptions are just that - an "educated guess" at the current and future use. The current presentation is a very conservative illustration (it won't be any noisier than is presented, and probably won't reach the depicted levels). Since no significant noise impacts are indicated by the current depiction, the PAC agreed that no changes are warranted.

Carlos De La Torre asked about potential impacts to migrating birds around the sewage ponds to the north of the airport. N. Pela explained that no existing problem is evident, but that the jurisdictional agencies are now getting their first chance to comment on this. An environmental assessment (EA) of the Runway 2-20 extension in the future will also have to address this.

Mr. De La Torre commented that the City may be considering opening up a landfill just north of the airport in the future. Mr. Pela said that this would also be subject to the future EA analysis process. FAA would discourage this land use within 10,000' of the runway end.

6. Nick Pela presented Section 6: Airport Layout and Development Phasing Plan. The ALP was developed based on Development Alternate #2, as selected by the PAC at the last meeting. Major recommended development features of the ALP were pointed out. Two areas of noncompliance with current FAA standards were found. These are:

- The existing parallel taxiway was constructed at a 175' offset from Runway 17-35. The FAA standard separation is 240'. A request for waiver is included on the draft ALP, since relocation of the taxiway would be not be economically feasible.
- The existing overhead power line along the Bisbee Junction Road would be an obstruction to the planned Runway 2 approach surface.

Mr. Levine commented that he thought there was no existing power line along the highway. Mr. Pela said that it was added in response to a comment at the last PAC meeting that there was a power line, and that subsequent investigation of an aerial photo seemed to verify this. Pela and Fields said that they would field verify this after the meeting. *(NOTE: Field investigation after the meeting verified that there is no overhead power along the highway. What appear to be power poles on the aerial photo are actually underground telephone/electrical risers. The ALP will be revised prior to submittal to the FAA.)*

Mr. Pela commented on ADOT's planned GPS approach to Bisbee. The Master Plan concludes that an instrument approach will not be feasible because of terrain and airspace (Mexico border) restrictions. If an approach were activated, it would probably have very high minimums - possibly up to 1,000' AGL descent minimums and greater than 1 mile visibility. The ADOT suggestion of a 400' descent minimum would not be feasible. The ALP is based on maintaining the airport as visual only.

Mr. Pela requested that the City provide the location of the existing campground septic tank.

PAC asked if we should provide an access road to the future campground. Mr. Pela said that the campground is for airplane camping only, and that maintenance vehicles could access the campground via the apron.

Mr. De La Torre asked for clarification as to which hangar would be demolished. Mr. Pela said that the Master Plan calls for demolition of Hangar #3 and rehabilitation of Hangar #4 (the southernmost hangar). Richard Soto asked about rehabilitating both hangars under Historic Preservation grants. Mr. Pela said that the City could get these buildings on the Register of Historic Places, but that funding would be difficult to get, since the grant program is very limited and Bisbee would be competing against more "fundable" attractions such as courthouses, schools, and even the BDI terminal building. The City could, of course, register and rehabilitate both buildings using local funding.

Mr. Soto commented on the need for a future helipad in the apron area. Mr. Pela said that this would be added to the ALP prior to FAA submittal.

Mr. Soto also commented that Bill Seiboldt may be developing a private hangar area on his adjacent industrial land. The development would include up to 10 new hangars, and may occur this Fall. Pela stated that taxiway access to the industrial lots would be added to the ALP.

7. PAC asked for clarification on the FAA and state's priorities for funding allocation, specifically whether Bisbee Municipal will compete with other airports in the region/state/country. Mr. Pela stated that all grant funding is prioritized with safety and capacity projects given the top priority. Bisbee will have to compete for funding in this sense, but not directly with Cochise College/BDI/Benson/Tombstone because of different "niche" uses (as was justified by the County RASP). However, development levels and timing of improvements at BDI could affect Bisbee Muni.
8. Richard Soto commented that the City may have a problem coming up with its matching share of the CIP. The PAC agreed. The City's sewer project will require a large commitment of money.
9. K. Fields presented the draft of Section 7: Financial Analysis/Economic Development.

PAC asked about the possibility of the FAA requiring landing fees at GA airports in the future. Mr. Pela said that he doesn't see this as a possibility. GA landing fees are more a tool for keeping small aircraft away than a viable revenue source for small airports. A. Kleinschmidt commented that it is the rule in Europe.

PAC questioned the assumptions made for land leases, hangar rents, T-Shades and tiedowns. K. Fields said that these will be adjusted in the final draft to include a 5%/year increase in fees.

N. Pela commented that most of the projected revenues will be dependent on the City making the recommended improvements (more hangars, etc.).

10. Mr. Pela discussed the recommended FAR Part 139 improvement schedule. At the last PAC meeting, it was decided that this would be included as a separate schedule that could be inserted into the CIP if and when a Part 139 operation happens. It is also important to note that some or all of the improvements may be waived after FAA review of the actual Part 139 plan.
11. Mr. Pela asked that the last PAC meeting not be scheduled until after the FAA and ADOT review the ALP. The FAA has asked for a minimum of 6 weeks for ALP review.

These minutes are intended to be a record of the major points of discussion. If any statements are incorrect or if there were important items omitted, please contact Nick Pela at (602) 553-8817 x209 (Fax 602-553-8816 / email njpela@aol.com).

cc: Attendees
Distribution List

ORDINANCE NO. O-00-11

AN ORDINANCE OF THE MAYOR AND COUNCIL OF THE CITY OF BISBEE, ARIZONA, ADOPTING THE BISBEE AVIATION CODE, PROMULGATING RELATED RULES AND REGULATIONS, ESTABLISHING FEES, PROVIDING FOR SANCTIONS AND REPEALING ORDINANCE O-78-70, AS AMENDED.

WHEREAS, the City of Bisbee is the owner and operator of an Airport which is operated for the use and benefit of the general public; and

WHEREAS, an Airpark which will access and use the Airport is being established; and

WHEREAS, the orderly provision of aviation related services at and near the airport is essential for the efficient and safe operation of the Airport and aircraft operations; and

WHEREAS, the City Council determined that it is equitable, and applicable federal regulations require, that aviation related activities connected to the airport bear certain costs of constructing, operating and maintaining the Airport and aviation related facilities; and

WHEREAS, the Federal Aviation Administration imposes certain minimum standards of airport facilities and airport operations; and

WHEREAS, the Federal Aviation Administration through grant assurances and other funding and non-funding requirements imposes restrictions to prevent unjust discrimination; and

WHEREAS, it is essential to the safe, efficient and orderly operation of the Airport that the City be at all times informed about persons using the Airport and Airpark facilities for aeronautical activities and the nature of the activities; and

WHEREAS, the City Council determined that the rules, regulations and minimum operating standards set forth in the Bisbee Aviation Code adopted by reference herein are necessary for the public health, safety and welfare of Airport and Airpark users and the general public.

NOW THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF BISBEE, ARIZONA AS FOLLOWS:

Section 1: That certain document known as the "Bisbee Aviation Code," three copies of which are on file in the office of the City Clerk of the City of Bisbee, Arizona which document was made a public record by Resolution No. R-00-09 of the City of Bisbee, Arizona, is hereby referred to, adopted and made a part hereof as if fully set out in this Ordinance.

Section 2: Ordinance 0-78-70, and its amendments, are hereby repealed upon the effective date of this Ordinance. Any and all liability for fees, sanctions or otherwise which exist at the time this Ordinance becomes effective are preserved and shall continue unaffected by this Ordinance.

Section 3: Chapter 14 of the City Code presently entitled "Airport" is repealed and replaced with the "Bisbee Aviation Code" adopted by this Ordinance.


Section 4: Upon a finding of responsibility to a civil violation of the Bisbee Aviation Code, the City Court shall impose a civil sanction not to exceed two hundred fifty dollars (\$250.00) for each violation.

Section 5: If any section, subsection, paragraph, sentence, clause, phrase or portion of this Ordinance, or the Bisbee Aviation Code adopted by it, should be declared unconstitutional or invalid for any reason whatsoever, such decision shall not affect the remaining portions of said Ordinance or Code which shall remain in full force and effect and to this end the provisions of said Ordinance and Code are declared to be severable.

PASSED, APPROVED AND ADOPTED BY THE MAYOR AND COUNCIL OF THE CITY OF BISBEE, ARIZONA this 6 day of June, 2000.


Lyle Reddy, Mayor

ATTEST:


Acting City Clerk Wanda L. Leikem

APPROVED AS TO FORM:


City Attorney

Revisions and Additions to Bisbee Municipal Airport Master Plan PAC Workbook

September 25, 2000



READ ACROSS

Cover:

REMOVE and DISCARD PAC Workbook
Cover (no date) from front of notebook.

INSERT new "FINAL REPORT" cover in
front of notebook.

Table of Contents:

REMOVE and DISCARD Pages TOC-1
through TOC-4, dated April 2, 1999.

REMOVE and DISCARD Pages TOC-5
through TOC-7, dated June 11, 1999.

REMOVE and DISCARD Pages TOC-8 and
TOC-9, dated June 15, 1999.

INSERT new and revised Pages TOC-1
through TOC-9, dated September 25, 2000.

PREFACE

REMOVE and DISCARD Page P-1, dated
March 30, 1999.

REMOVE and DISCARD Page P-4, dated
March 30, 1999.

INSERT revised Page P-1, dated September
25, 2000.

INSERT revised Pages P-4 and P-5, dated
September 25, 2000.

Revisions and Additions to Bisbee Municipal Airport Master Plan PAC Workbook

September 25, 2000



READ ACROSS

Section 1: Introduction, Background & Inventory:

(No Changes)

Section 2: Forecasts of Aviation Activity:

(No Changes)

Section 3: Airport Facility Requirements:

(No Changes)

Section 4: Development Alternatives:

(No Changes)

Section 5: Environmental Factors:

REMOVE and DISCARD Pages 5-1 through 5-14, dated June 10, 1999.

INSERT new Pages 5-1 through 5-16, dated September 29, 1999.

INSERT letter Exhibits A through G (following Page 5-16).

Revisions and Additions to Bisbee Municipal Airport Master Plan PAC Workbook

September 25, 2000



READ ACROSS

Section 6: Airport Layout & Development Phasing Plan:

INSERT Airport Layout Plan set (11x17 sheets 1 through 8) following Page 6-9.

Section 7: Financial Plan:

REMOVE and DISCARD Pages 7-1 through 7-24, dated June 15, 1999.

INSERT new Pages 7-1 through 7-25, dated August 11, 1999.

INSERT new "Part 139 Improvements - Bisbee Municipal Airport" table (following Page 7-25).

Appendix A - Bibliography

(No Changes)

Appendix B - PAC Meeting Minutes and Public Involvement:

INSERT PAC Meeting #4 Minutes, dated June 24, 1999 (at end of section, following PAC Meeting #3 Minutes).

INSERT Ordinance No. O-00-11, dated June 6, 2000.

Revisions and Additions to Bisbee Municipal Airport Master Plan
PAC Workbook

September 25, 2000



READ ACROSS

Revisions and Additions to Bisbee Municipal Airport Master Plan PAC Workbook

June 15, 1999



READ ACROSS

Table of Contents:

REMOVE and DISCARD Pages TOC-5
through TOC-7, dated May 4, 1999.

INSERT new and revised Pages TOC-5
through TOC-7, dated June 11, 1999.

INSERT new Pages TOC-8 and TOC-9,
dated June 15, 1999.

PREFACE

(No Changes)

Section 1: Introduction, Background & Inventory:

REMOVE and DISCARD Page 1-23, dated
April 1, 1999.

INSERT corrected Page 1-23, dated June
11, 1999.

REMOVE and DISCARD Page 1-34, dated
April 1, 1999.

INSERT revised Page 1-34, dated June 11,
1999.

Section 2: Forecasts of Aviation Activity:

(No Changes)

Revisions and Additions to Bisbee Municipal Airport Master Plan PAC Workbook

June 15, 1999



READ ACROSS

Section 3: Airport Facility Requirements:

REMOVE and DISCARD Page 3-2, dated April 2, 1999.

REMOVE and DISCARD Page 3-4, dated April 27, 1999.

REMOVE and DISCARD Page 3-6, dated April 27, 1999.

REMOVE and DISCARD Page 3-9, dated April 27, 1999.

REMOVE and DISCARD Pages 3-11 and 3-12, dated April 27, 1999.

REMOVE and DISCARD Page 3-16, dated April 27, 1999.

REMOVE and DISCARD Pages 3-18 through 3-26, dated April 27, 1999.

INSERT revised Page 3-2, dated June 11, 1999.

INSERT revised Page 3-4, dated June 11, 1999.

INSERT revised Page 3-6, dated June 11, 1999.

INSERT revised Page 3-9, dated June 11, 1999.

INSERT revised Pages 3-11 and 3-12, dated June 11, 1999.

INSERT revised Page 3-16, dated June 11, 1999.

INSERT revised Pages 3-18 through 3-27, dated June 11, 1999.

Section 4: Development Alternatives:

REMOVE and DISCARD Pages 4-7 through 4-14, dated May 5, 1999.

REMOVE and DISCARD Figures 4A through 4C, dated April 2, 1999 (Do not discard Figure 4D).

INSERT revised Pages 4-7 through 4-15, dated June 11, 1999.

INSERT new Figures 4A through 4C, dated April 27, 1999.

Revisions and Additions to Bisbee Municipal Airport Master Plan PAC Workbook

June 15, 1999



READ ACROSS

Section 5: Environmental Factors:

(New Section)

INSERT new Pages 5-1 through 5-14, dated June 10, 1999.

Section 6: Airport Layout & Development Phasing Plan:

(New Section)

INSERT new Pages 6-1 through 6-9, dated June 10, 1999.

Section 7: Financial Plan:

(New Section)

INSERT new Pages 7-1 through 7-24, dated June 15, 1999.

Appendix A - Bibliography

(No Changes)

Appendix B - PAC Meeting Minutes and Public Involvement:

INSERT PAC Meeting #3 Minutes and attachments, dated May 20, 1999.

- END -

Please update and review your PAC Workbook as soon as possible prior to the next meeting, which is scheduled for June 24, 1999.

Revisions and Additions to Bisbee Municipal Airport Master Plan PAC Workbook

May 5, 1999



READ ACROSS

Table of Contents:

REMOVE and DISCARD Pages TOC-5
and TOC-6, dated April 2, 1999.

INSERT new and revised Pages TOC-5
through TOC-7, dated May 4, 1999.

PREFACE

(No Changes)

Section 1: Introduction, Background & Inventory:

(No Changes)

Section 2: Forecasts of Aviation Activity:

(No Changes)

Section 3: Airport Facility Requirements:

REMOVE and DISCARD Pages 3-4
through 3-24, dated April 2, 1999.

INSERT revised Pages 3-4 through 3-26,
dated April 27, 1999.

Revisions and Additions to Bisbee Municipal Airport Master Plan PAC Workbook

May 5, 1999



READ ACROSS

Section 4: Development Alternatives:

REMOVE and DISCARD Pages 4-1
through 4-5, dated April 2, 1999

REMOVE and DISCARD Figures 4A
through 4C, dated April 2, 1999 (Do not
discard Figure 4D).

INSERT new and revised Pages 4-1
through 4-14, dated May 5, 1999.

INSERT new Figures 4A through 4C,
dated April 27, 1999.

Appendix A - Bibliography

(No Changes)

Appendix B - PAC Meeting Minutes and Public Involvement:

INSERT PAC Meeting #2 Minutes, dated
April 22, 1999 (5 pages).

- END -

Please update and review your PAC Workbook as soon as possible prior to the next meeting,
which is scheduled for May 20, 1999.

**Bisbee Municipal Airport
Master Plan**

Date of Meeting: Thursday, 10:30 A.M., March 25, 1999

Minutes Prepared By: Kristina Fields

Attendees: Ron Schreier, P.E., Gannett Fleming, Inc.
Kristina Fields, Gannett Fleming, Inc.
Ray Boucher, ADOT-Aeronautics
Ray Sparkman, Public Works Director
Carlos De La Torre, City of Bisbee Engineer
Richard Soto, Airport Manager, City of Bisbee Liaison
Leslie Wolslagel, Airport Advisory Board
Ronald Jarvis, Airport Advisory Board
Peter Levine, Airport Advisory Board
Bill Seibold, Facility User
Steve Relyea, Facility User

The first PAC meeting was held at the City of Bisbee Library. The purpose of the meeting was to "kick off" the airport master plan and to obtain input from the PAC members. The following items were discussed at the meeting:

Introduction of Attendees

- Ron S.- Explained the milestones/phases of the PAC meetings and also explained the PAC process to all attendees.
- Ron J.- Commented that the written report was well done, interesting, and easy to read.
- Ray S.- Said all future PAC meetings will be held at City Hall.
- Kristina- Suggested to members that they read the history section of the master plan, but that we will not discuss it in detail at this meeting, unless members have any comments.
Explained the recent improvements at the airport.
- Ray B.- Asked about the NDB and PAPI status. (This item will be discussed later in the meeting.)
- Ron S.- Discusses the following items:
Regional Airport System Plans (FAA and ADOT)
National Plan of Integrated Airport Systems
Terminal Area Forecasts
ADOT Arizona State Aviation Needs Study
Regional Plans (1982 + 1994 - Cochise County Airport System Plans
Bisbee Municipal Airport Master Plan 1987

Ron S.-

NPIAS

Almost 3,300 NPIAS airports in the U.S.

NPIAS development brings existing airports up to current design standards and to add capacity to congested airports

Bisbee Municipal Airport is part of NPIAS (GA Facility)

NPIAS forecast - 12 based aircraft in 1997

NPIAS GA Facility - no scheduled airline services and at least 10 based aircraft

General Rules - 30 minutes from another NPIAS airport

FAA Terminal Area Forecasts (TAF)

Operational data over 870 U.S. airports, mostly collected by the control tower.

Bisbee data not included in the TAF, but it does include aviation activity within Arizona.

(NOTE: After the meeting, the Consultants received the updated TAF, which does include Bisbee Municipal Airport. This information will be included in the next set of working papers.)

It shows an increase in air carrier passenger enplanements, in scheduled airline operations, in total aircraft operations.

The Arizona aviation economy appears to be healthy.

1988 Arizona Aviation System Plan

Shows 16 aircraft based at Bisbee Municipal Airport in 1987 (3,072 operations) with a projected increase to 22 based aircraft by 1999 (4,442 operations) and to 29 by 2010 (6,227 operations)

February 1987 Arizona State Aviation System Inventory showed 26 based aircraft Bisbee Municipal Airport, with 5,000 estimated annual operations, which shows a discrepancy with the 1988 Arizona Aviation System Plan.

1995 Arizona State Aviation Needs Study updated the projections to 12 based aircraft in 1995 and to 16 by 2015.

Ron S.-

Cochise County Airport Systems Plan

Prepared in 1982 by Willdan Associates

Discussed the overbuilding and duplication of airport facilities in Cochise County. Consolidation alternatives were presented, but none ever followed.

In 1992 the WLB Group updated the Cochise County Airport Systems Plan and completed it in 1994.

This plan noted BDI, Bisbee Douglas, and Cochise College airports have overlapping service areas.

It also noted that 17 aircraft were based in Bisbee in 1992 and they projected 20 aircraft in 1997 and 29 aircraft in 2012.

The plan recommended improvements: widen the runway and taxiway, install MIRLs, improve the crosswind runway (2-20), install additional shaded tiedowns, provide security lighting.

- Ron S.- Bisbee Municipal Airport Master Plan
Showed 23 based aircraft in 1987 and estimated 9,775 total annual operations.
Projected 27 based aircraft in 2010 (referred attendees to table on page 1-15).
Airport Layout Plan 1989 which reflects the improvements in the 1987 Master Plan
- Richard- Asked who revised the 1989 ALP?
- Ron S.- Gannett Fleming. It could have been done as part of the 1987 Master Plan or done on its own.
- Ron S.- Discusses the Bisbee Municipal Airport Inventory and explains the rating system: good, fair, and poor
Pavement Conditions: structures are good, surfaces are fair to poor, the rubberized chip seal has loose aggregate which is a hazard (see the four sheets at the end of section 1).
- Ron J.- Asked if it is common practice to chip seal at airports?
- Ron S.- Said Nells wanted to do it, it was cost effective and worked good to prevent cracking.
- Carlos- What is your suggestion to improve it?
- Ron S.- A thin overlay.
- Ron J.- Looks like it would be a good structural base.
- Ron S.- Agrees, an overlay would be pretty easy.
- Ron J.- Of course it would make a difference if heavier aircraft were to come in.
- Ron S.- Discusses the following items:
3" to 4" drop from the edge of pavement to the runway shoulders and taxiway shoulders in some areas, which is substandard, therefore the shoulders are characterized as poor.
- Ron S.- Said to Richard that maybe when they are removing vegetation from the shoulder they are taking off excess material off the shoulder.
- Carlos- Would it remedy the problem to add dirt to the pavement edge?
- Ron S.- Yes, if it is compacted. You can keep a 1.5 inch drop there.

- Ron S.- Continues to discuss the following items:
Runway 2-20: good, as far as a dirt landing strip goes
Many taxiway reflectors are missing or damaged
Pavement marking tie downs are faded
T shade hangar area, pavement structure is poor
Auto parking area is fair (graded gravel)
Access road is fair (gravel)
Discusses the drainage system
Is functional and in good condition
Some inlets and outlets need to be cleaned out
- Ron J.- Said that on Hangar 7, the south end was coming apart and it was repaired, but very sharp pieces of metal were on the ground. He suggests that if it needs to be repaired again, it should be maintained fast, because it was a hazard.
- Richard- Hangar 5 has had electrical problems. There does not seem to be enough power. When the compressor runs, the lights dim. The Quonset hut electricity is disconnected and it needs a new door, it's in poor shape.
- Carlos- The amount of electricity supplied to buildings 1, 2, 5, and 8 and the fuel system may be too low, it should be looked at.
- Richard- Said that the load is too big, that they may want to improve the capacity and increase it for expansion.
- Ron J.- Said that on building 4, the door is off track, the rail is broken apart and inoperative and often times is left wide open, allowing the wind to get inside the hangar, which could damage the aircraft.
- Richard- Comments to the board that he thinks fire protection should be a priority, for the safety of the aircraft owners. We should consider adding it to the Master Plan.
- Ray S.- Said the Naco Fire District is working on getting them (the City of Bisbee) a 10,000 gallon storage tank for fire protection. They have one that they are willing to give to the City.
- Carlos/Richard- It will be above ground and are looking at a good location for it, possibly at the south entrance off the highway to serve the airport and surrounding facilities. It will serve about a 5 to 7 mile radius.
- Ray B.- How will you fill it, with a well?
- Richard- Yes.
- Ray B.- How is it funded? You should add it to your upcoming projects to get it funded. You need to develop a game plan for the airport's use of the tank.
- Carlos- The ownership of the tank is not determined yet.

- Ray B.- How much do you think it will cost? You may get some funding if you can include it in the Program. I can help with the tank's location. We can discuss it.
- Ron S.- The tank is around 10,000 gallons?
- Carlos- Yes, that is what is available.
- Ron J.- It could provide water for campers who might want to come out to the airport to camp. Camping at airports has increased in popularity in Arizona.
- Ray B.- Asked about the OC chart. He said that the elevations are critical because of the use of GPS. The state wants to get all airport elevations/coordinates for all the runways. If there is no OC chart, we should get it on the agenda. Also consider displaced thresholds.
- Kristina- Discusses the airport lighting and visual aids: MIRLS, rotating beacon, wind cone, segmented circle, PAPIs, guidance signs all good
Fuel system good and in compliance
Existing water system is fair, septic tank is good
Security fence and property line is good
Non-directional radio beacon is non-functioning
Security lighting is provided by floodlights located on the hangars
Discussed the condition of the airport buildings: terminal and hangars
Mentioned the airport elevation and precipitation information
Discussed the airport classifications
- Richard- For future planning we should consider the opening of Kartchner Caverns. We should think about getting a Part 139 rating, so tour groups can fly into the airport. He would like to see Bisbee get into that, it would help the community.
- Ron S.- Discusses the Airport Service Areas
States what assumptions are made.
Shows the theoretical service areas shown in the Master Plan handouts.
Discusses the airspace system, says that there are no apparent conflicts between activity at Bisbee Municipal Airport and the current airspace structure.
Discusses the land use map, Figure 1D.
- Ron S.- Says that the records we received show residential zoning at the airport.
- Bill- I own 20 acres next to the airport. My records show it is industrial. The zoning was likely changed to industrial.
- Ray B.- It is important to include this.
- Ron S.- Is it zoned residential or industrial?
- Ray S.- We will find out.

- Carlos- We can get the planning/zoning map for the area near the airport. It is part of the City of Bisbee Master Plan.
- Richard- I have received many comments for building additional T hangars and others are interested in leasing the south area to build their own T hangars. I get many calls from people from Sierra Vista and Douglas who are interested. How can we include this in the master plan? I think it will definitely help.
- Ron S.- In one part of the master plan we discuss hangar demand, we can increase the demand. Does Richard keep a list of people interested in hangars?
- Richard- I can give you four phone numbers of people who ask for T hangars.
- Ron S.- We'll go through the calculations and also include it in the terminal area plans and can talk about what the City would like to do, lease the property?
- Richard- So far, yes, lease.
- Ron S.- Does ADOT keep a study on rates/fees?
- Ray B.- Yes, I think Sierra Vista does.
- Ron J.- I want to say that the shade hangars are bad. They are too high, allowing too much exposure. They should be moved down. They could have doubled the number of aircraft space if they would have been located differently. They could be parked tail to tail, but now you cannot get around to the west of them. A good example of shade hangars is at Ryan Field. Also they leak.
- Ray B.- Maybe they can be moved.
- Ron J.- If you back in, you need to secure the aircraft because the winds are very strong. If you're going to add more shade hangars, should look at Ryan Field.
- Ron- Weren't those built with free labor?
- Comment- There was a trade off with the workers.
- Ron J.- The potential here is wonderful.
- Ron S.- Asks if there are any more comments.
- Richard- Has handed out questionnaires about the NDB, whether they want to fix it or not.
- Ron J.- They are worthless, almost everyone uses GPS.
- Richard- If we can get the NDB running, Fort Huachuca will use it. We have the license and frequency for it.

Comment- NDBs will get phased out, why put money into it?

Ray B.- If you were to get the NDB operational and the City to maintain it, it would be ok. The FAA is not maintaining them. You should be cautious about not wanting to use it.

Ron S.- Is there money to replace it by ADOT?

Ray B.- I wonder who bought it. ADOT?

Kristina- ADOT funded, so yes.

Ray B.- Have you had an electrician check out what is wrong with the NDB?

Richard- Three boards blew out.

Comment- It may cost \$5,000 to \$15,000 to fix.

Richard- We can get an old military NDB from military base in Oakland.

Ray B.- Get Davis Monthan Air Force Base to help you find out who to ask and where to look. They are collectors of old electronic equipment.

Richard- That may be an inexpensive way to go. Can they incorporate that with GPS?

Ray B.- GPS will come anyway. The precision instrument airports will be done first. You need to get your elevations ASAP. Let us know how much it will cost to fix the NDB, it could cost \$10,000.

Comment- The only traffic that can use it are those that have ADFs and those are getting phased out.

Ray B.- GPS is very accurate.

Ron J.- For GPS approaches, what happens if GPS is shut down?

Ray B.- Soon we'll have encrypted GPS, 250 feet is as close as you can get.

Richard- We have the NDB, I'd like to get it going.

Others- No, we could just sell our frequency.

Ray B.- If you want this to be a recreational facility you should include it in your master plan.

Ron S.- A layout of camping facilities will be looked at again.

Ray B.- Recreational airports are on the edge of oblivion due to the loss of funds. Ray encourages attendees to contact legislature about putting airport money back into the airport fund.

Richard hands out a memo listing short term and long term goals for the airport.

- Ron S.- Asks Richard about item 2 on the short term list. Are you talking about the electrical to the building facilities?
- Richard- Yes.
- Ray B.- The state is looking to develop an airport services package to install at all airports. It would include items such as a telephone, so all facilities would at least have a certain minimum of services.
- Carlos- What kind of horizontal and vertical control is being used for the master plan?
- Ron S.- What was used in the previous projects. We could use others if the City has more.
- Carlos- Is it survey based?
- Ray S.- We could tie the aerial survey from the other project in with this project.
- Carlos- Can we get copies of the mylars and digital format that you have?
- Ron S.- We use AutoCAD. You will get a copy of all electronic files.
- Ray S.- We just updated our AutoCAD system.
- Ron S.- We have many plans that the City could have.
- Ray B.- I suggest that the City consider developing an airport's influence area document so residential units located in the area around the airport show on their deed that the property is in an airport influence area. For an airport like Bisbee, now is a good time to put it into place. I highly recommend it. The Consultants can show you a typical influence area.
- All attendees seems in agreement with Ray B.'s suggestion.
- Carlos- Can I have a copy of the PAC process chart?
- Ron S.- Yes, we will send it to you.
- Steve- I want to make an observation. I am a recreational pilot and have noticed that there have been some maintenance issues discussed in the meeting today. I would like to suggest that the City create a maintenance position at the airport. By having someone performing general maintenance, it would save the City money in the long run. I would like to rent the Quonset hut and would also like to volunteer to do the job.
- Ron S.- Discussed the schedule of the second PAC meeting. Asked the group if Thursday mornings were good times for meetings. The group said yes. The group tentatively set two dates April 29 and May 13. The meeting will be held at 10:30 at City Hall. Ray and Carlos will tentatively reserve a place at City Hall for the meeting. When the exact date for the second PAC meeting is known, the Consultants will inform the group.

These minutes are intended to be a record of the major points of discussion. If any statement are incorrect or if there were important items omitted, please contact Kristina Fields at (602)553-8817.

cc: Attendees
Distribution List

Bisbee Municipal Airport Master Plan

Date of Meeting: Thursday, 10:30 A.M., April 22, 1999
Minutes Prepared By: Kristina Fields

Attendees: Nick Pela, Nicholas J. Pela & Associates
Kristina Fields, Gannett Fleming, Inc.
Ray Sparkman, Public Works Director
Carlos De La Torre, City of Bisbee Engineer
Jeff Blackmore, Assistant Airport Manager
Leslie Wolslagel, Airport Advisory Board
Charles Perry, Airport Advisory Board
Arthur Kleinschmidt, Airport Advisory Board
John Harris, Airport Advisory Board
Robert Page, Airport Advisory Board

The second PAC meeting was held at the Bisbee City Hall, second floor conference room. The purpose of the meeting was to present Forecasts of Aviation Activity, Airport Facility Requirements, Development Alternatives, and to obtain additional input from the PAC members. The following items were discussed at the meeting:

Introduction of Attendees and Sign-in.

The minutes from the first PAC meeting were approved.

Kristina Went through the revisions and additions to the PAC workbook.

Nick Asked the PAC group to consider approving Section 1: Inventory, Background, & Inventory. Nick informed the committee that they will still be able to add information and/or make changes to this first section in the future.

Group Approved Section 1 of the Master Plan.

Nick Explained forecasting to the attendees and went through Section 2: Forecasts of Aviation Activity. Informed the group that the new FAA Terminal Area Forecast does now currently include Bisbee Municipal Airport. This is updated in the workbook.

Kristina Went through Section 3: Airport Facility Requirements. Discussed the introduction and discussed NDB/Instrument Approaches and Navaids/Airspace Considerations/Geographic Constraints/Instrument Approach Capability and noted the recommendations. Asked the group if they had any comments.

Les Said the NDB is not wanted.

Nick Said that the PAC put rehabilitating the NDB on the list of short term improvements.

Jeff Said that TRW wants to use the NDB for their drones (remote control airplanes). Said that if one of the planes gets lost, the NDB can be used to locate it.

Les Said they will be able to locate it with updated equipment as well.

Jeff The cost to fix the NDB may cost \$10,000 to \$15,000.

Nick That money could be better used for matching grant money for other needed improvements.

Group Where is the closest NDB?

Nick The closest NDB is at Fort Huachuca.

Robert Asked how high rehabilitating the NDB was on the priority list. (The list referred to here is the list that the PAC group had come up with for desired improvements at the airport, which was made before the first PAC meeting.)

Nick It is on the short term improvements list.

Group What happened to the NDB that caused it to not work?

Jeff It was struck by lightning.

Charles Wasn't there insurance on it? And if not, why not?

Group Good question.

Robert We should discuss the cost of repair and long term investments to help us determine what we should do.

John Lets get rid of the NDB and the antenna. When it is windy the antenna is in the way when you land (on the closed short East/West runway).

Group Said that they will discuss the NDB on their own and let the Consultants know what they decide.

Charles GPS is mostly used now. The VFR NDB is useless, it won't be used much longer.

Robert It's used for student traffic/training.

Carlos A hand held GPS only costs about \$200 now.

Les If we should get rid of anything, it should be the NDB.

Group All seemed to agree. The group decided that they will get their members together and discuss it and let the Consultants know if they want to rehabilitate the NDB or not.

Kristina Discussed the Primary Runway Requirements and Recommendations and asked the group if they had any comments.

John Is the only solution to the loose aggregate problem giving it an overlay? Can it be oiled? It just seems like the overlay will be expensive.

Nick Said that oiling the surface will likely only work for a few years and then the loose aggregate problem will likely continue. With an overlay the pavement section will be stronger, which will be better in the long run. On the PAC's list of improvements, you stated resurfacing the runways and taxiways as a long term improvement. We recommend making it an immediate recommendation. If we can't get funding for it now, we may have to look at other temporary solutions. You should try to come up with as much documentation for the complaints about the loose aggregate causing damage to aircraft.

Kristina Discussed the Crosswind Runway Requirements and Recommendations and asked the group if they had any comments. (There were no comments on the cross wind recommendations.)

Kristina Discussed the Taxiway Requirements and Recommendations and asked the group if they had any comments. (There were no comments on the taxiway recommendations.)

Kristina Discussed the Aircraft Parking and Storage Requirements and Recommendations and asked the group if they had any comments. (There were no comments on the aircraft parking and storage recommendations.)

Kristina Discussed the Terminal Building Requirements and Recommendations and asked the group if they had any comments.

Art Said that the hangars are historic, so why wouldn't they get funding?

Nick Said that they are probably eligible for listing on the National Historic Register. However, the funding is very competitive and limited and would be difficult to get for this type of project.

Art Asked if there are any plans to build a much larger FBO hangar. Said if any aircraft breaks down at the airport, we don't have the facilities/supplies to help them, they end up getting more help from other airports in the area. This is not good marketing for our airport.

Nick Suggests that we set aside an FBO hangar development area.

Kristina Discussed the Automobile Parking and Access Requirements and Recommendations and asked the group if they had any comments. (There were no comments on the automobile parking and access recommendations.)

Kristina Discussed the Airport Visual Aids Requirements and Recommendations and asked the group

if they had any comments. (There were no comments on the Airport Visual Aids recommendations.)

Kristina Discussed the Aircraft Fuel Service Requirements and Recommendations and asked the group if they had any comments.

John Asked if we would consider putting in a self serve pump that would accept personal credit cards and wondered how much it would cost.

Nick Said we will find out how much it would cost.

Group Agreed that it would be a good thing to look into.

John Asked if you can charge fuel to your credit card now?

Jeff Yes, Visa and Master Card only.

Kristina Discussed the Fencing Requirements and Recommendations and asked the group if they had any comments. (There were no comments on the fencing recommendations.)

Kristina Discussed the Recreational Airport Facility Requirements and Recommendations and asked the group if they had any comments. (There were no comments on the recreational airport facility recommendations.)

Kristina Discussed the Automobile Parking and Access Requirements and Recommendations and asked the group if they had any comments. (There were no comments on the automobile parking and access recommendations.)

Kristina Discussed the Utility Requirements and Recommendations and asked the group if they had any comments.

Ray/Carlos Said that the 10,000 gallon water tank will only be for fire protection. This will not be potable water.

Nick Explained Section 4: Development Alternatives. He started with an introduction to the alternatives and then explained Alternative 1 and asked for any comments.

Art Asked if we could include replacement of the paved runup pads on Runway 2-20.

Nick Said yes, if we keep this a dirt strip this will be a good thing to have. The FAA's priority for crosswind runways is low, but if we can prove it's a safety issue, there will be more potential for funding.

Group Stated that the cross wind runway is used often.

Nick Recommended that the airport continue collecting wind data.

- Nick Explained Alternative 2 and asked for any comments. (There were no comments on Alternative 2).
- Nick Explained Alternative 3 and asked for any comments. (There were no comments on Alternative 3).
- Nick Explained the FAA 75' primary runway width requirement for ARC B-II airports to the group. He said that many general aviation airports in Arizona have only a 60' primary runway width and the state allows it. The 75 ' width is a general width requirement which is based on the requirements of airports all over the country. The extra width is provided mainly for snow removal, which is not an issue in Bisbee. The wider width is also better in crosswinds. If ADOT does not fund the cross wind runway, we can make a case for widening the runway to assist in crosswinds.
- Nick Explained Alternative 4 and asked for any comments.
- Carlos Said the 40 acres south of the existing sewer lagoons to the north is the designated expansion area for that facility. The proposed 8,950' long runway shown on this alternate won't work unless we also relocate the sewer lagoons.
- Nick Yes, the FAA has a criteria that you cannot put a runway within 10,000 feet of anything that attracts birds, like the lagoons. This would be a definite environmental assessment issue if the runway were to be extended.
- Group Said they do not want to consider Alternative 4.
- Nick Said that he will work on the comparison of the Alternatives 1, 2, and 3 for the next meeting.

The next PAC meeting was tentatively set for Thursday, June 3 at 10:00 A.M. at the Bisbee City Hall, second floor conference room.

These minutes are intended to be a record of the major points of discussion. If any statement are incorrect or if there were important items omitted, please contact Kristina Fields at (602)553-8817.

cc: Attendees
Distribution List

BISBEE MUNICIPAL AIRPORT

Bisbee, Arizona

AIRPORT MASTER PLAN - 1999

BIBLIOGRAPHY

- 1.) Bisbee Municipal Airport Exhibit "A" Airport Property Map - Ellis, Murphy, Holgate & Johnson, dated 3/2/76, as revised 3/30/79.
- 2.) Bisbee Municipal Airport Construction Plans: Runway, Taxiway & Apron Paving - Ellis, Murphy & Holgate, dated 3/1/78, as revised "as-built" 9/5/78.
- 3.) Bisbee Municipal Airport Construction Plans for Segmented Circle & Lighted Wind Cone - Ellis, Murphy & Holgate, dated 7/17/79, as revised "as-built" 2/29/80.
- 4.) Bisbee Municipal Airport Construction Plans for Medium Intensity Runway Lighting - Ellis, Murphy & Holgate, dated 6/80, as revised "as-built" 11/20/80.
- 5.) 1982 Cochise County Airport System Plan - Willdan Associates, Inc. - July, 1982.
- 6.) Bisbee Municipal Airport Runway 17-35 Paving Plan - Ellis-Murphy, Inc., as revised "as-built" 10/13/83.
- 7.) Bisbee Municipal Airport Master Plan Report 1987 - Ellis-Murphy, Inc. in association with James Vercellino & Associates, dated 11/4/87.
- 8.) Bisbee Municipal Airport Plans for Pavement Preservation of Runway 17-35, Taxiways, Aircraft Aprons and Pavement Markings - Ellis-Murphy, Inc., dated 10/87, as revised "as-built" 11/28/88.
- 9.) Bisbee Municipal Airport Existing Topo Survey @ Runway Intersection - Ellis-Murphy, Inc., dated 11/88.
- 10.) Cochise County Zoning Maps - Amended 1988.
- 11.) FAA Census of Civil Aircraft - Federal Aviation Administration - 1970-1989.

- 12.) Bisbee Municipal Airport Airport Layout Plan - Ellis-Murphy, Inc., dated 9/87, as revised on 1/11/89 and approved by the City of Bisbee 2/15/89.
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- 14.) City of Bisbee - Bisbee Municipal Airport Non-Directional Beacon (NDB) and Generic Visual Glide Slope Indicator (GVGI) - Johannessen & Girand, dated 2/19/91, as revised "as-built" 2/20/92.
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- 16.) Community Profile: Bisbee - Arizona Department of Commerce, dated 6/94.
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- 18.) Federal Air Regulations, Part 77 - Amended December 28, 1995.
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- 23.) Phoenix Sectional Aeronautical Chart - National Oceanic & Atmospheric Administration, National Ocean Service - May 22, 1997.
- 24.) Bisbee-Douglas International Airport Comprehensive Master Plan - Nicholas J. Pela & Associates/Gannett Fleming, Inc. - June, 1997.
- 25.) Cochise County Airport Master Plan - Bucher, Willis & Ratliff - December, 1997.
- 26.) 1995 Arizona State Aviation Needs Study - Bucher, Willis & Ratliff - December, 1997.
- 27.) FAA Terminal Area Forecasts - Federal Aviation Administration - 1998.
- 28.) Bisbee Municipal Airport Aerial Photo - ADOT Aeronautics Division, dated 2/6/98.

- 29.) Community Profile: Bisbee - Arizona Department of Commerce, dated 6/98.
- 30.) Profile: Cochise County, Arizona - Arizona Department of Commerce, dated 9/98.
- 31.) AcData Computer Database, Version 6.10 - Nicholas J. Pela & Associates.
- 32.) Airport Capacity and Delay (FAA Advisory Circular AC 150/5060-5).
- 33.) Runway Length Requirements for Airport Design (FAA Advisory Circular AC 150/5325-4A).
- 34.) Bisbee SE Quadrangle Map - U.S. Department of the Interior, Geological Survey 1958.
- 35.) Naco Quadrangle Map - U.S. Department of the Interior, Geological Survey 1958.
- 36.) Bisbee NE Quadrangle Map - U.S. Department of the Interior, Geological Survey 1958 (photoinspected 1976).
- 37.) Bisbee Quadrangle Map - U.S. Department of the Interior, Geological Survey 1958 (photorevised 1978).
- 38.) Federal Aviation Regulations, Part 139, as revised thru Changes 1, 2 and 3, December 19, 1990.

**Bisbee Municipal Airport
Master Plan**

Date of Meeting: Thursday, 10:30 A.M., March 25, 1999

Minutes Prepared By: Kristina Fields

Attendees: Ron Schreier, P.E., Gannett Fleming, Inc.
Kristina Fields, Gannett Fleming, Inc.
Ray Boucher, ADOT-Aeronautics
Ray Sparkman, Public Works Director
Carlos De La Torre, City of Bisbee Engineer
Richard Soto, Airport Manager, City of Bisbee Liaison
Leslie Wolslagel, Airport Advisory Board
Ronald Jarvis, Airport Advisory Board
Peter Levine, Airport Advisory Board
Bill Seibold, Facility User
Steve Relyea, Facility User

The first PAC meeting was held at the City of Bisbee Library. The purpose of the meeting was to "kick off" the airport master plan and to obtain input from the PAC members. The following items were discussed at the meeting:

Introduction of Attendees

- Ron S.- Explained the milestones/phases of the PAC meetings and also explained the PAC process to all attendees.
- Ron J.- Commented that the written report was well done, interesting, and easy to read.
- Ray S.- Said all future PAC meetings will be held at City Hall.
- Kristina- Suggested to members that they read the history section of the master plan, but that we will not discuss it in detail at this meeting, unless members have any comments.
Explained the recent improvements at the airport.
- Ray B.- Asked about the NDB and PAPI status. (This item will be discussed later in the meeting.)
- Ron S.- Discusses the following items:
Regional Airport System Plans (FAA and ADOT)
National Plan of Integrated Airport Systems
Terminal Area Forecasts
ADOT Arizona State Aviation Needs Study
Regional Plans (1982 + 1994 - Cochise County Airport System Plans
Bisbee Municipal Airport Master Plan 1987

Ron S.-

NPIAS

Almost 3,300 NPIAS airports in the U.S.

NPIAS development brings existing airports up to current design standards and to add capacity to congested airports

Bisbee Municipal Airport is part of NPIAS (GA Facility)

NPIAS forecast - 12 based aircraft in 1997

NPIAS GA Facility - no scheduled airline services and at least 10 based aircraft

General Rules - 30 minutes from another NPIAS airport

FAA Terminal Area Forecasts (TAF)

Operational data over 870 U.S. airports, mostly collected by the control tower.

Bisbee data not included in the TAF, but it does include aviation activity within Arizona.

It shows an increase in air carrier passenger enplanements, in scheduled airline operations, in total aircraft operations.

The Arizona aviation economy appears to be healthy.

1988 Arizona Aviation System Plan

Shows 16 aircraft based at Bisbee Municipal Airport in 1987 (3,072 operations) with a projected increase to 22 based aircraft by 1999 (4,442 operations) and to 29 by 2010 (6,227 operations)

February 1987 Arizona State Aviation System Inventory showed 26 based aircraft Bisbee Municipal Airport, with 5,000 estimated annual operations, which shows a discrepancy with the 1988 Arizona Aviation System Plan.

1995 Arizona State Aviation Needs Study updated the projections to 12 based aircraft in 1995 and to 16 by 2015.

Ron S.-

Cochise County Airport Systems Plan

Prepared in 1982 by Willdan Associates

Discussed the overbuilding and duplication of airport facilities in Cochise County. Consolidation alternatives were presented, but none ever followed.

In 1992 the WLB Group updated the Cochise County Airport Systems Plan and completed it in 1994.

This plan noted BDI, Bisbee Douglas, and Cochise College airports have overlapping service areas.

It also noted that 17 aircraft were based in Bisbee in 1992 and they projected 20 aircraft in 1997 and 29 aircraft in 2012.

The plan recommended improvements: widen the runway and taxiway, install MIRLS, improve the crosswind runway (2-20), install additional shaded tiedowns, provide security lighting.

- Ron S.- Bisbee Municipal Airport Master Plan
Showed 23 based aircraft in 1987 and estimated 9,775 total annual operations.
Projected 27 based aircraft in 2010 (referred attendees to table on page 1-15).
Airport Layout Plan 1989 which reflects the improvements in the 1987 Master Plan
- Richard- Asked who revised the 1989 ALP?
- Ron S.- Gannett Fleming. It could have been done as part of the 1987 Master Plan or done on its own.
- Ron S.- Discusses the Bisbee Municipal Airport Inventory and explains the rating system: good, fair, and poor
Pavement Conditions: structures are good, surfaces are fair to poor, the rubberized chip seal has loose aggregate which is a hazard (see the four sheets at the end of section 1).
- Ron J.- Asked if it is common practice to chip seal at airports?
- Ron S.- Said Nells wanted to do it, it was cost effective and worked good to prevent cracking.
- Carlos- What is your suggestion to improve it?
- Ron S.- A thin overlay.
- Ron J.- Looks like it would be a good structural base.
- Ron S.- Agrees, an overlay would be pretty easy.
- Ron J.- Of course it would make a difference if heavier aircraft were to come in.
- Ron S.- Discusses the following items:
3" to 4" drop from the edge of pavement to the runway shoulders and taxiway shoulders in some areas, which is substandard, therefore the shoulders are characterized as poor.
- Ron S.- Said to Richard that maybe when they are removing vegetation from the shoulder they are taking off excess material off the shoulder.
- Carlos- Would it remedy the problem to add dirt to the pavement edge?
- Ron S.- Yes, if it is compacted. You can keep a 1.5 inch lift there.

- Ron S.- Continues to discuss the following items:
Runway 2-20: good, as far as a dirt landing strip goes
Many taxiway reflectors are missing or damaged
Pavement marking tie downs are faded
T shade hangar area, pavement structure is poor
Auto parking area is fair (graded gravel)
Access road is fair (gravel)
Discusses the drainage system
Is functional and in good condition
Some inlets and outlets need to be cleaned out
- Ron J.- Said that on Hangar 7, the south end was coming apart and it was repaired, but very sharp pieces of metal were on the ground. He suggests that if it needs to be repaired again, it should be maintained fast, because it was a hazard.
- Richard- Hangar 5 has had electrical problems. There does not seem to be enough power. When the compressor runs, the lights dim. The Quonset hut electricity is disconnected and it needs a new door, it's in poor shape.
- Carlos- The amount of electricity supplied to buildings 1, 2, 5, and 8 and the fuel system may be too low, it should be looked at.
- Richard- Said that the load is too big, that they may want to improve the capacity and increase it for expansion.
- Ron J.- Said that on building 4, the door is off track, the rail is broken apart and inoperative and often times is left wide open, allowing the wind to get inside the hangar, which could damage the aircraft.
- Richard- Comments to the board that he thinks fire protection should be a priority, for the safety of the aircraft owners. We should consider adding it to the Master Plan.
- Ray S.- Said the Naco Fire District is working on getting them (the City of Bisbee) a 10,000 gallon storage tank for fire protection. They have one that they are willing to give to the City.
- Carlos/Richard- It will be above ground and are looking at a good location for it, possibly at the south entrance off the highway to serve the airport and surrounding facilities. It will serve about a 5 to 7 mile radius.
- Ray B.- How will you fill it, with a well?
- Richard- Yes.

- Ray B.- How is it funded? You should add it to your upcoming projects to get it funded. You need to develop a game plan for the airport's use of the tank.
- Carlos- The ownership of the tank is not determined yet.
- Ray B.- How much do you think it will cost? You may get some funding if you can include it in the Program. I can help with the tank's location. We can discuss it.
- Ron S.- The tank is around 10,000 gallons?
- Carlos- Yes, that is what is available.
- Ron J.- It could provide water for campers who might want to come out to the airport to camp. Camping at airports has increased in popularity in Arizona.
- Ray B.- Asked about the OC chart. He said that the elevations are critical because of the use of GPS. The state wants to get all airport elevations/coordinates for all the runways. If there is no OC chart, we should get it on the agenda. Also consider displaced thresholds.
- Kristina- Discusses the airport lighting and visual aids: MIRLS, rotating beacon, wind cone, segmented circle, PAPIs, guidance signs all good
Fuel system good and in compliance
Existing water system is fair, septic tank is good
Security fence and property line is good
Non-directional radio beacon is non-functioning
Security lighting is provided by floodlights located on the hangars
Discussed the condition of the airport buildings: terminal and hangars
Mentioned the airport elevation and precipitation information
Discussed the airport classifications
- Richard- For future planning we should consider the opening of Kartchner Caverns. We should think about getting a Part 139 rating, so tour groups can fly into the airport. He would like to see Bisbee get into that, it would help the community.
- Ron S.- Discusses the Airport Service Areas
States what assumptions are made.
Shows the theoretical service areas shown in the Master Plan handouts.
Discusses the airspace system, says that there are no apparent conflicts between activity at Bisbee Municipal Airport and the current airspace structure.
Discusses the land use map, Figure 1D.
- Ron S.- Says that the records we received show residential zoning at the airport.
- Bill- I own 20 acres next to the airport. My records show it is industrial. The zoning was likely changed to industrial.

- Ray B.- It is important to include this.
- Ron S.- Is it zoned residential or industrial?
- Ray S.- We will find out.
- Carlos- We can get the planning/zoning map for the area near the airport. It is part of the City of Bisbee Master Plan.
- Richard- I have received many comments for building additional T hangars and others are interested in leasing the south area to build their own T hangars. I get many calls from people from Sierra Vista and Douglas who are interested. How can we include this in the master plan? I think it will definitely help.
- Ron S.- In one part of the master plan we discuss hangar demand, we can increase the demand. Does Richard keep a list of people interested in hangars?
- Richard- I can give you four phone numbers of people who ask for T hangars.
- Ron S.- We'll go through the calculations and also include it in the terminal area plans and can talk about what the City would like to do, lease the property?
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- Comment- It may cost \$5,000 to \$15,000 to fix.
- Richard- We can get an old military NDB from military base in Oakland.
- Ray B.- Get Davis Malcolm Air Force Base to help you find out who to ask and where to look. They are collectors of old electronic equipment.
- Richard- That may be an inexpensive way to go. Can they incorporate that with GPS?
- Ray B.- GPS will come anyway. The precision instrument airports will be done first. You need to get your elevations ASAP. Let us know how much it will cost to fix the NDB, it could cost \$10,000.
- Comment- The only traffic that can use it are those that have ADFs and those are getting phased out.
- Ray B.- GPS is very accurate.
- Ron J.- For GPS approaches, what happens if GPS is shut down?
- Ray B.- Soon we'll have encrypted GPS, 250 feet is as close as you can get.
- Richard- We have the NDB, I'd like to get it going.

Others- No, we could just sell our frequency.

Ray B.- If you want this to be a recreational facility you should include it in your master plan.

Ron S.- A layout of camping facilities will be looked at again.

Ray B.- Recreational airports are on the edge of oblivion due to the loss of funds. Ray encourages attendees to contact legislature about putting airport money back into the airport fund.

Richard hands out a memo listing short term and long term goals for the airport.

Ron S.- Asks Richard about item 2 on the short term list. Are you talking about the electrical to the building facilities?

Richard- Yes.

Ray B.- The state is looking to develop an airport services package to install at all airports. It would include items such as a telephone, so all facilities would at least have a certain minimum of services.

Carlos- What kind of horizontal and vertical control is being used for the master plan?

Ron S.- What was used in the previous projects. We could use others if the City has more.

Carlos- Is it survey based?

Ray S.- We could tie the aerial survey from the other project in with this project.

Carlos- Can we get copies of the mylars and digital format that you have?

Ron S.- We use AutoCAD. You will get a copy of all electronic files.

Ray S.- We just updated our AutoCAD system.

Ron S.- We have many plans that the City could have.

Ray B.- I suggest that the City consider developing an airport's influence area document so residential units located in the area around the airport show on their deed that the property is in an airport influence area. For an airport like Bisbee, now is a good time to put it into place. I highly recommend it. The Consultants can show you a typical influence area.

All attendees seems in agreement with Ray B.'s suggestion.

Carlos- Can I have a copy of the PAC process chart?

Ron S.- Yes, we will send it to you.

Steve- I want to make an observation. I am a recreational pilot and have noticed that there have been some maintenance issues discussed in the meeting today. I would like to suggest that the City create a maintenance position at the airport. By having someone performing general maintenance, it would save the City money in the long run. I would like to rent the Quonset hut and would also like to volunteer to do the job.

Ron S.- Discussed the schedule of the second PAC meeting. Asked the group if Thursday mornings were good times for meetings. The group said yes. The group tentatively set two dates April 29 and May 13. The meeting will be held at 10:30 at City Hall. Ray and Carlos will tentatively reserve a place at City Hall for the meeting. When the exact date for the second PAC meeting is known, the Consultants will inform the group.

These minutes are intended to be a record of the major points of discussion. If any statement are incorrect or if there were important items omitted, please contact Kristina Fields at (602)553-8817.

cc: Attendees
Distribution List